

CORNHUSKER ARMY AMMUNITION PLANT

NEBRASKA

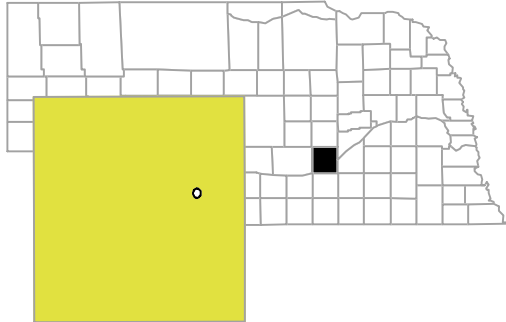
EPA ID# NE2213820234

EPA Region 7

City: 6 miles west of Grand Island

County: Hall County

Other Names:



SITE DESCRIPTION

The 19-acre Cornhusker Army Ammunition Plant is a U.S. Army Armament, Munitions, and Chemical Command facility. On standby status since 1973, the operation leases 16 square miles of land for agriculture, grazing, and wildlife management activities. The plant was built in 1942 to produce munitions and provide support functions during World War II. It has been in and out of production over the years. The plant consists of five main components: five major production areas where munitions were loaded, assembled, and packed; a fertilizer manufacturer; two major storage facilities; a sanitary landfill; and a burn ground where materials contaminated with explosives were ignited. When the plant was active, staff disposed of wastewater contaminated with explosives into 56 earthen surface impoundments, which were located near the five production areas. Dried solids from the bottom of the pits periodically were scraped and ignited at the burning ground. Releases from the surface impoundments have contaminated approximately 500 private wells. Activities at the site currently are limited to maintenance and leasing operations. Once environmental studies required for real estate transactions are completed, the Army plans to sell the property. Polluted groundwater has migrated off the site and has been detected as far as 7 miles beyond the plant's border. The area affected by groundwater contamination is mostly suburban, and residents now rely on public water supply for drinking water. Approximately 3,000 people live within 1 mile, and 27,000 live within 3 miles of the site. Groundwater also is used for farmland irrigation and for watering livestock.

Site Responsibility:

This site is being addressed through Federal actions.

NPL LISTING HISTORY

Proposed Date: 10/15/84

Final Date: 07/22/87

Deleted Date:

THREATS AND CONTAMINANTS

Description: Groundwater both on and off the site is contaminated with various explosives. Soils are contaminated with various explosives and heavy metals such as lead, chromium, and cadmium. Human and livestock health may be adversely affected by drinking contaminated groundwater or through direct contact with contaminated soil. The provision of bottled waste has reduced the potential of exposure to hazardous substances in the drinking water.

CLEANUP APPROACH

Response Action Status

Immediate Actions: The Army provided bottled water to the 250 homes with contaminated wells until residences could be hooked up to the city's water system. In 1986, the municipal water system was extended to 800 residences in Grand Island. A dewatering system was completed to control the high water table. In 1987, the Army started an incineration program to treat the contaminated soil in the 56 surface impoundments. Workers excavated the soil and then incinerated it to destroy the contaminants. The excavated pits were backfilled with off-site sand and gravel, and the ash from the incinerator was landfilled on site. The Army had burned 40,000 tons of soil by 1988, when the State-monitored operation ended. In 1991 and 1992, the Army provided bottled water to additional homes with contaminated wells until residences were hooked up to the City's water system. In addition, the EPA built a protective barrier around unexploded ordinance at the burning ground in 1993.

Groundwater: In 1990, an investigation by the Department of the Army identified several areas of potential contamination. The Army investigated the plume of groundwater that moved off site to determine the types and levels of contaminants present, and the extent of threat to human health and the environment. The Army submitted a draft report of the investigation in early 1993, but the EPA, the Army, and the State of Nebraska agreed that additional work would be necessary due to data gaps.

This work involved dividing the site into smaller areas to facilitate the additional field work required. A study of ways to prevent further contaminant migration for the groundwater contaminated with explosives was completed in 1994. An interim cleanup remedy involving groundwater containment was selected in 1994 that calls for the construction of a groundwater pump and treat system. The system is operational and an additional onsite well will be constructed

in the summer of 1999. When this well is in operation, no contaminated groundwater will leave the site.

Description:

Site Facts: Cornhusker Army Ammunition Plant is participating in the Installation Restoration Program, a specially funded program established by the Department of Defense (DoD) in 1978 to identify, investigate, and control migration of hazardous contaminants at military and other DoD facilities. An Interagency Agreement between the EPA, Nebraska Department of Environmental Control, and the DoD was signed in 1990. Under this Agreement, the Army will investigate and clean up the site.

ENVIRONMENTAL PROGRESS



The extension of the municipal water supply to over 800 residences and the provision of bottled water to additional homes has reduced the potential of exposure to hazardous substances in the drinking water. The incineration of contaminated soil has reduced other pathways of contamination at the Cornhusker Army Ammunition Plant site. These actions will protect the public health and the environment while further studies are being conducted and cleanup activities are being completed. The construction of the onsite groundwater extraction system began the summer 1997 and was completed a year later. The system extracts contaminated groundwater at seven onsite wells. After passing through a carbon filtration system, the drinking quality groundwater discharges to a ditch on the site. The offsite contamination plume continues to shrink as measured by the groundwater monitoring study. After the onsite extraction system is in operation for a year, the Army will perform a groundwater model with the new data. The corrected groundwater model will be used to pick the location of the off site extraction wells. This final phase of the remediation of Cornhusker will be construction.

SITE REPOSITORY



Grand Island Public Library, 211 North
Washington Street, Grand Island, NE
68802
Cornhusker Army Ammunition Plant,
102 North 60th Road, Grand Island,
NE 68803

Superfund Records Center
901 N. 5th St.
Kansas City, KS 66101
Mail Stop SUPR
(913)551-4038

REGIONAL CONTACTS

SITE MANAGER:

E-MAIL ADDRESS:

Robert Koke

koke.robert@epa.gov.

(913) 551-7468

COMMUNITY INVOLVEMENT

COORDINATOR:

PHONE NUMBER:

PUBLIC INFORMATION CENTER:

E-MAIL ADDRESS:

STATE CONTACT:

PHONE NUMBER:

Ken Maas, NDEH

(402) 471-2988

MISCELLANEOUS INFORMATION

STATE:

PACIFIC ISLAND(S):

073W

CONGRESSIONAL DISTRICT:

03

EPA ORGANIZATION:

SFD-SUPR/FFSE

MODIFICATIONS